

PHENIX WEEKLY PLANNING

8/16/2007

Don Lynch

2007 Summer Shutdown Schedule

<u>Item</u>	<u>Start</u>	<u>Complete</u>
RPC Factory set up	Started	2011?
HBD West repair	Started	9/30?
MuID collar removal, MMS move S.	Done	Done
Disconnect EC and Move to AH	Done	Done
C-A fold scaffolding, remove lift & ladder, disconnect gas sniffers	Done	Done
PHENIX techs disconnect water, elect., gas, fibers, RXNP blue cable		
Mike Rau remove lift wiring, disconnect TOF blower	Done	Done
Move EC to AH	Done	Done

Note: C-A Cooling water improvements are planned for this summer. This may involve interruption of water cooling for most/all of the summer. Please let me know if water cooling is necessary for any subsystem operations this summer.

2007 Summer Shutdown Schedule

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RPC Engineers coordination visit	Done	Done
Reconnect EC for maintenance in AH	Done	Done
Move MuID collar to AH	Done	Done
Misc. Subsystem Maint./repair/Upgrade	In Progress	10/1
Misc. Infrastructure Improvements	In Progress	10/1
Install IR floor plates, rolling cart & move manlift to IR	Done	Done
Remove MPC South	Done	Done
MPC South upgrade/ bench tests	In Progress	9/20
Remove SouthEast Vertical Lampshade	Done	Done
Move CM south	Done	Done
Remove MPC North	Done	Done
MPC North upgrade/bench tests	8/13	9/20
MuTr Capacitor Decap	Started	9/30

2007 Summer Shutdown Schedule (cont'd)

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<u>Item</u>	<u>Start</u>	<u>Complete</u>
MuTr FEE Prototype (wp done)	in progress	9/20
EC/EmCal survey	8/20	8/31
DOE Safety Audit (preliminary)	Done	Done
Install CM access ladder (wp needed)	9/13	9/30
Repair RXNP Phototube	8/20	8/27
Remove HBD East	9/15	9/30
Reinstall MPC North (wp needed)	8/20	9/20
Summer Sunday Tour	8/15	8/21
DOE Safety Audit (intensive)	8/20	8/31
Install CM Crane	postponed to 2008	
C-A arc flash work (no power)	8/23	8/24
Neutron shield support design & install.	8/23	9/30
Labor Day Holiday & Floating Holiday	9/3	9/4
HBD Pre survey at SB	9/17	9/21
HBD West Mechanical/Gas Reinstall	9/23	9/30
HBD EAST Mechanical/Gas Reinstall	9/24	9/30
HBD Electrical Reinstall	9/17	10/8

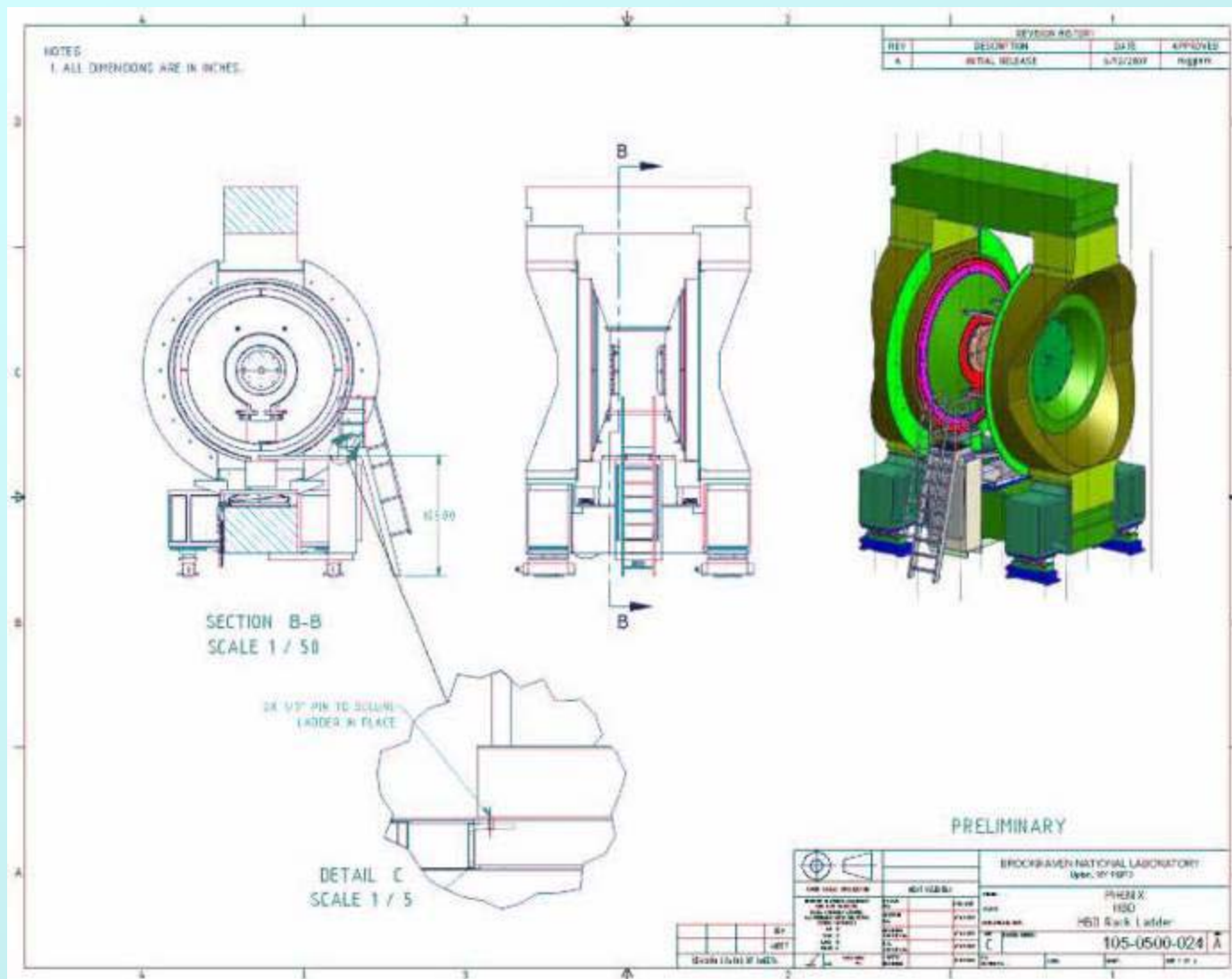
2007 Summer Shutdown Schedule (cont'd)

Move CM North	9/20	9/21
Reinstall MPC South	9/24	9/28
HBD installation survey	9/23	9/30
Reinstall MMS East Vert. Lampshade	10/1	10/5
EC Roll In	10/8	10/10
C-A fold scaffolding	10/8	10/8
Move MuID collars to IR	10/9	10/9
Roll in-to IR and North to run pos.	10/10	10/11
PHENIX techs reconnect water, elect., gas, fibers	10/12	10/19
InstaCarpenters restore scaffolding, Re-install lift & ladder, re-connect gas sniffers	10/12	10/19
Mike Rau re-install lift wiring, Re-connect TOF blower	10/12	10/19
DC East repair	10/12	10/19
HBD/MPC/Other TBD Commissioning	10/1	10/31
Start of Run 8	11/1	11/1

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CM Ladder/Stair Shutdown Access

TECHNICAL SUPPORT NOON



- PO pinned
- To be used during shutdown (EC out) only.

MPC North & South

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8/16/2007

Weekly Planning Meeting

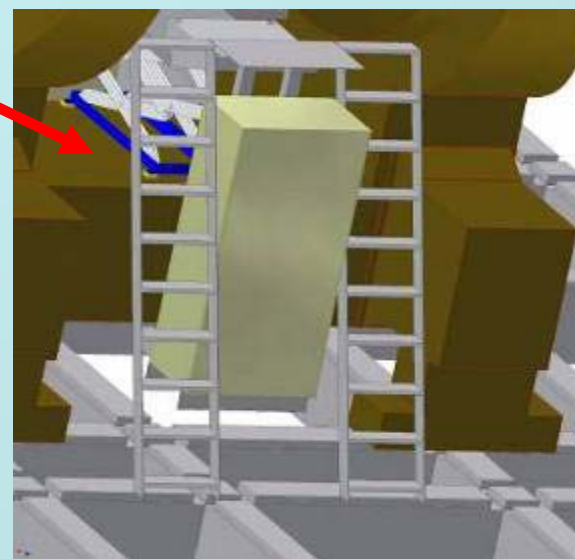
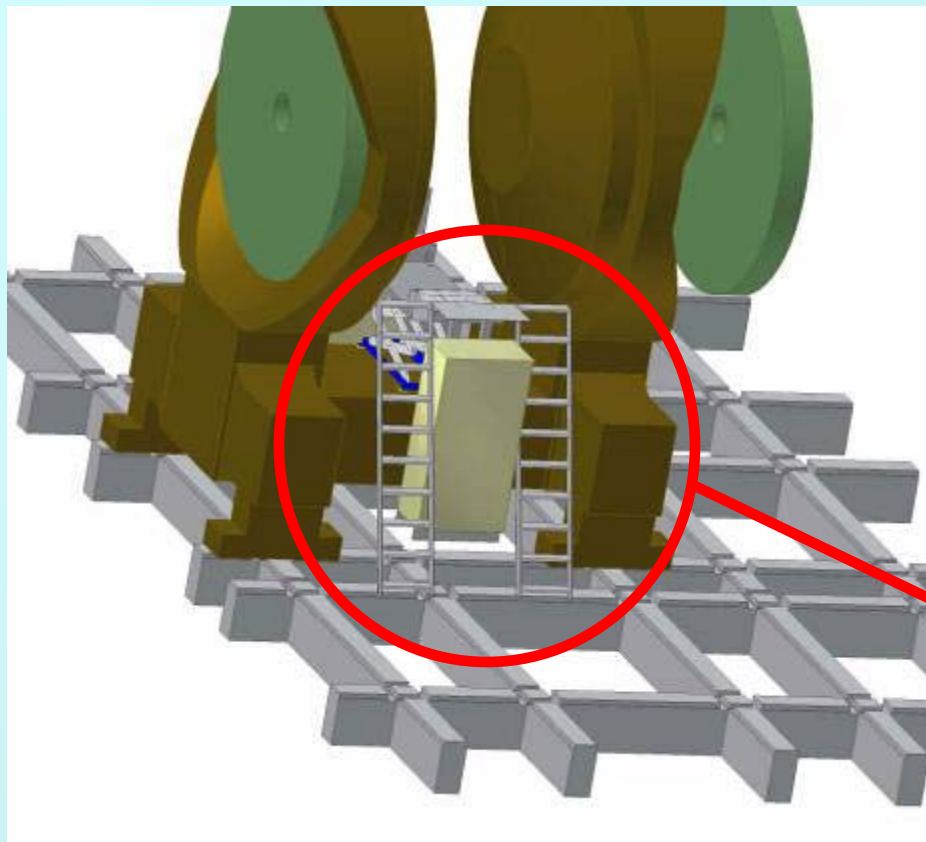
CM Ladder/Stair Run Access

Features:

60 deg. Alum ships ladder
(1 or 2) lifts off to store vertically
for run and/or to access rack
doors. (folding rail not shown)

Step up platform above rack and
cables.

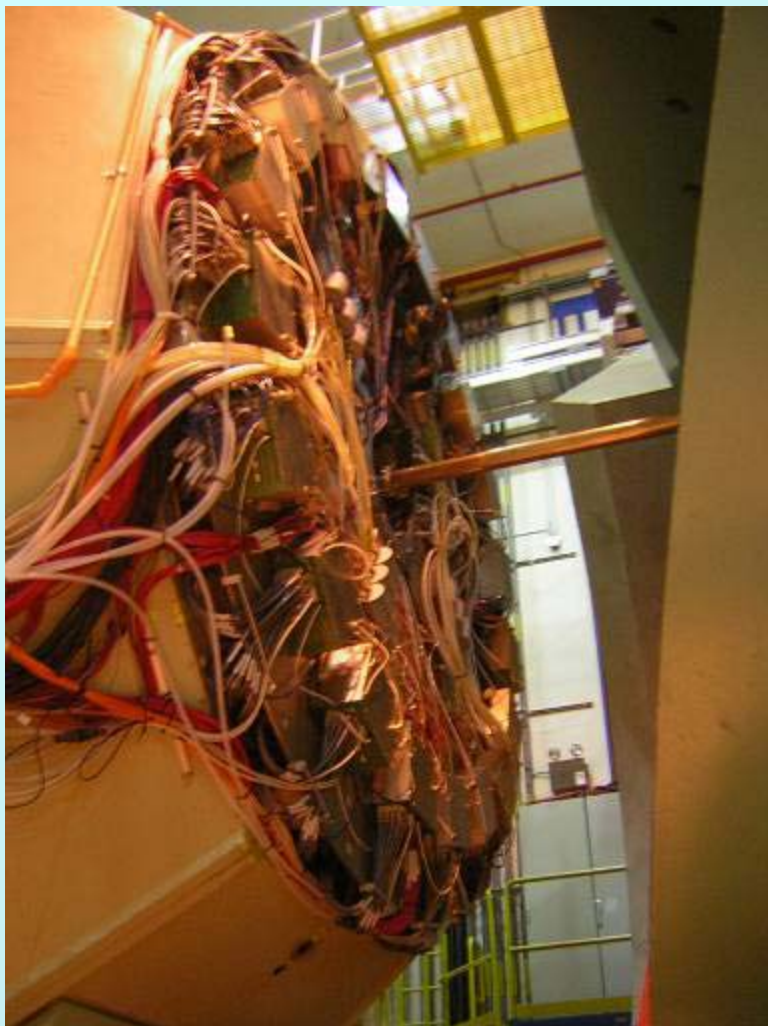
Working on modeling RICH & lead
brick interferences



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Station 1 access plan

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Preliminary Design
Concept:

3 levels

Bottom level just below
Station 1

Mid level 2 pcs just
below MPC cavity

Top level over the beam
pipe just above MPC
cavity

RPC Factory

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Work is continuing. Please make sure that all work in 912 is properly planned and approved.

8/16/2007

Weekly Planning Meeting

RPC Factory Issues

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A. Factory Set Up:

1. PHENIX tech support:

Gas: John T.

Elect: Frank T.

Mech: Kenny J.

2. Electrical work moving forward.

3. floor to be painted after elec. work

4. HVAC specs 18,000 BTU AC 4 HEPA filters, internally recirculated

5. Gas distribution design in progress

B. Safety Issues: Per Yousef's Minutes from review

- Calib./testing of SF6 monitors
- Gas system schematic in progress
- Gas system construction after approval
- Fire protection *piggy backed on 912 alarms*
- Gas environmental impact *Ralf update review numbers when gas system design is complete*
- Electronics/equipment review
- Factory users safety manual *interim Worker plan complete; final production version needed*

C. Factory Equipment

- Design & Fabrication (cosmic ray test stand - Kenny is working on it)
- Layout & installation shelves & A-frame is set up

RPC Factory

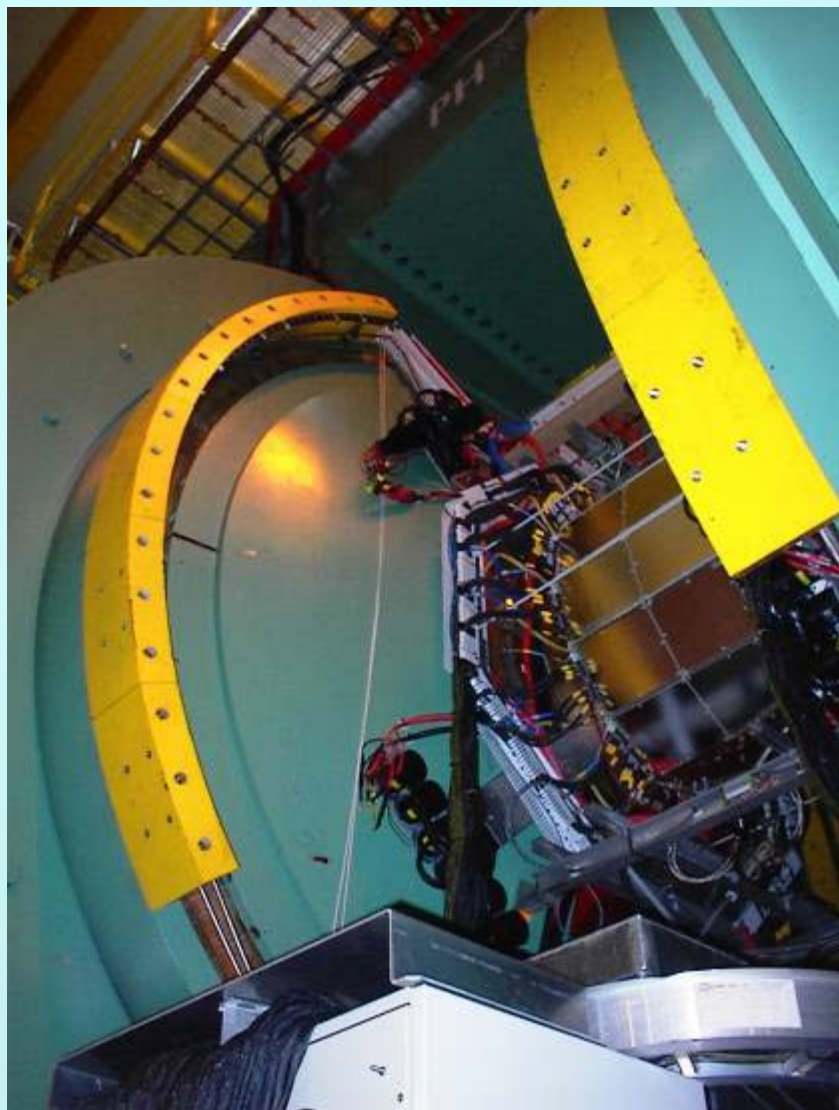
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8/16/2007

Weekly Planning Meeting

RXNP Repair



Tools Needed

- 1/2" and 3/4" black electrical tape
- Scissors
- Scalpel
- RTV
- Plastic cable ties (long and short)
- Isopropyl alcohol
- Kim wipes
- Optical grease
- Small hex screw driver
- Gloves for RTV
- Cotton Swabs

Procedure for replacing PMT

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- Label new PMT with tape
- Disconnect old PMT HV and signal cables
- Cut cable ties
- Unscrew plastic cap
- Remove RTV from notch in plastic cap (use scalpel, loosen with chemical?)
- Remove plastic cap from PMT
- Remove black electrical tape connecting PMT and cookie
- Detach PMT from cookie
- Wipe off optical grease



Damaged PMT

RTV that must
be removed



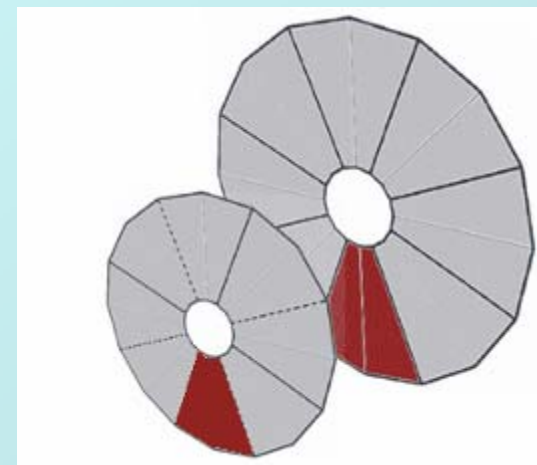
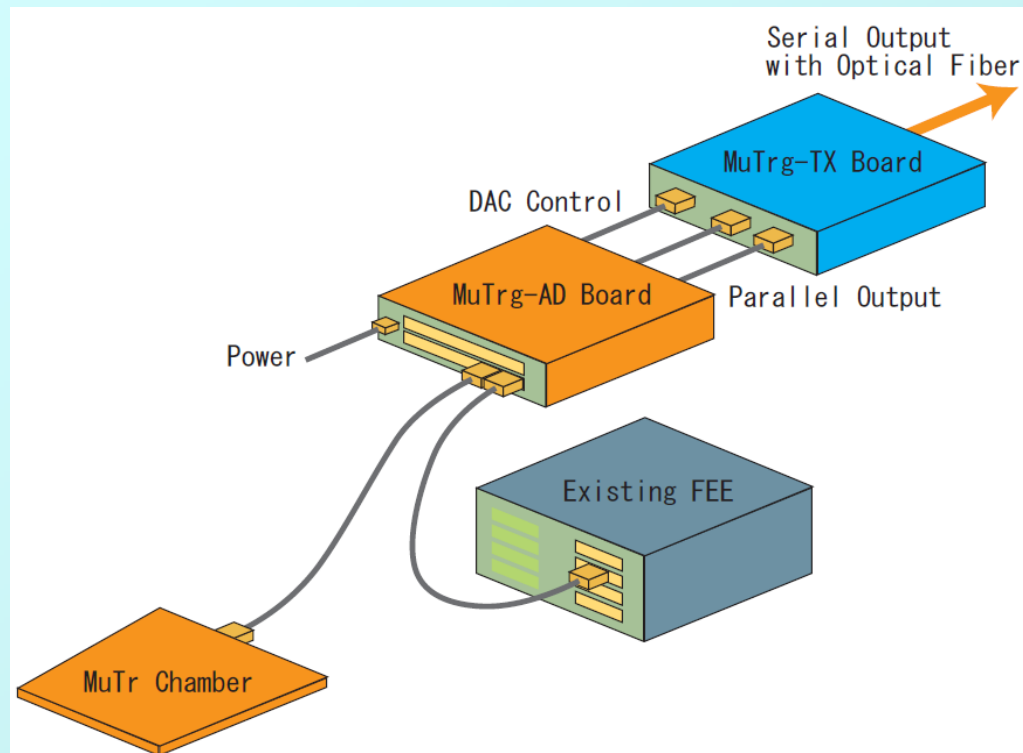
Procedure for replacing PMT

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- Clean PMT and cookie face with alcohol and wipes
- Apply grease to prism and attach PMT
- Tape PMT to prism with black electrical tape (taping involves several steps to ensure light tightness, *difficult to perform with one person when not on bench top*)
- Attach plastic cap and screw back on
- RTV notch in plastic cover
- Place PMT back on end of arm and secure with plastic ties



MuTr FEE Upgrade Prototype



Station 2:
5 AD board Chassis
3 TX board Chassis

Station 1:
3 AD-Board Chassis
2 TX-Board Chassis

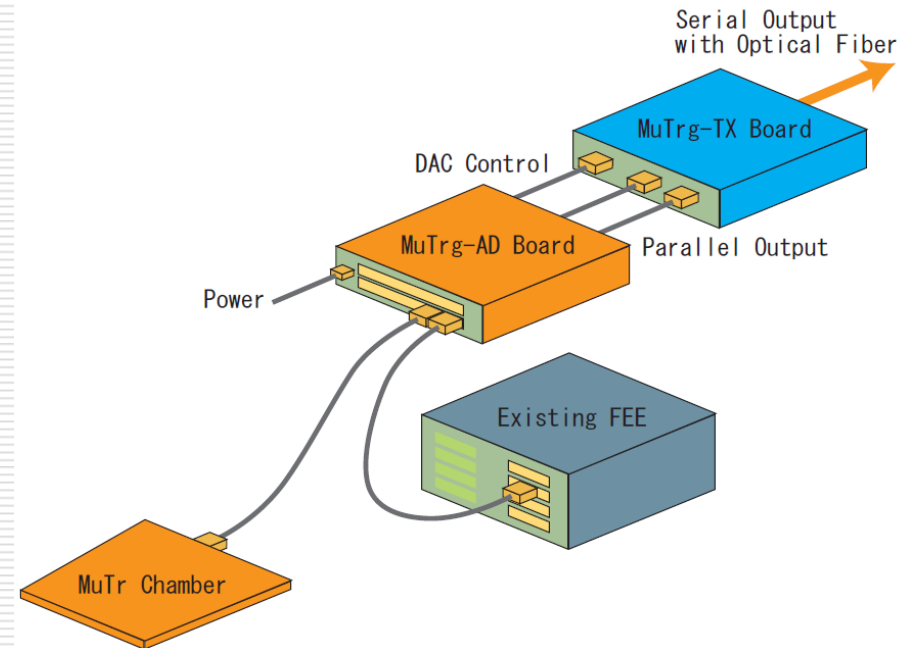
AD & TX boards arrive next week installation to begin next week. Jimmy & Kenny will help with mechanical installation; Carter & John T. will help with air & water issues; Frank T. will help with electrical & cabling

MuTR Fast FEE Upgrade Cosmic Test

RIKEN/RBRC

Itaru Nakagawa

The first module installation



Installation and Safety Review

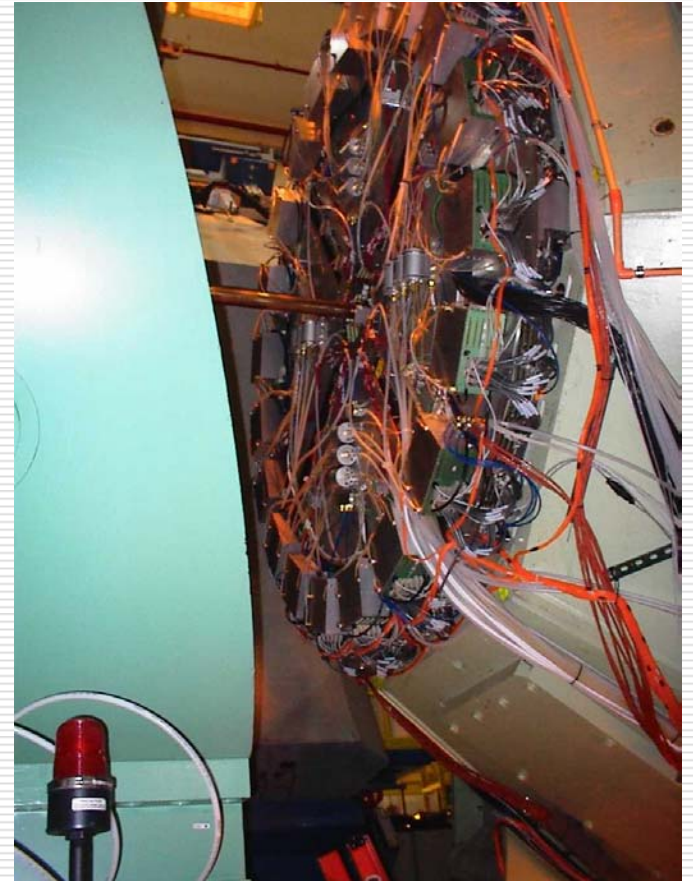
- ❑ Passed Safety Review on Monday.
- ❑ Started using LV.
- ❑ Install and test new boards one by one



Station-1 Install

3 AD boards
2 TX boards

Wait until Los Alamos
folks finish their activities
in station-1



Schedule

☐ Aug.6 : Preparation for Installation

☐ Aug.13 : Start Installation

☐ Aug.16 : Debugging

☐ Aug.23 : Production data taking.

☐ Sept.10~20 : Finish data taking

☐ Sept.10~20 : Start Uninstall

Phase-I

Phase-II

Schedule [Aug.16 ~ 24]

- ☐ Aug.16 First Chassis test and debugging
- ☐ Aug.17~18 Second and Third Chassis install+test
- ☐ Aug.17 Local DAQ setup (VME+NIM+PC)
- ☐ Aug.17 Station-1 installation plan
- ☐ Aug.20 Station-1 install and test
- ☐ Aug.20 RxNP turn on HV for DAQ test
- ☐ Aug.23 Station-2 water & dry air
- ☐ Aug.24 Station-1 water & dry air

- ☐ Aug.24?~ Production: CF₄ & isobutane gas

Station-1



3 AD-Board Chassis
2 TX-Board Chassis

Need to be accessible
to St-1 during test period

Ladder Access during tests

Mounting design in progress

MuTr FEE Upgrade Prototype



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8/16/2007

Weekly Planning Meeting

Schedule

- Prior to 8/6: Approval & Permits
- Aug.6 : Preparation for Installation
- Aug.13 : Start Installation
- Aug.16 : Debugging
- Aug.23 : Production data taking.
- Sept.10~20 : Finish data taking
- Sept.10~20 : Start Uninstall
- After 9/10: Test MuTr for unintended damage



Phase-I



Phase-II

Other Work



- Empty (except clean metal waste) and discard old container
- VTX prototype No support until after shutdown
- NCC prototype & electronics Mike L. & Richie - Thanks Kenny & Frank for nice work on short notice
- Drill & Tap grounding port for TEC grounding braid (currently uses platform rail mounting hole - subject to accidental disconnect when removing rail)

Neutron shielding test

Shield support design next week
Install in September for Run 8 tests



Safety/Security Notes:

DOE team intends to visit next Wednesday.

They want to attend the "Wednesday morning planning meeting" and watch confined space work later in the morning.

Keep everything nice and clean.

Things to know if asked:

1. All work is planned.
2. Phenix work control coordinators are
 - a. Don Lynch (mechanical)
 - b. Paul Giannotti (electrical)
 - c. Carter Biggs (gas systems)
3. C-A key ISM personnel are:
 - a. ESH Coordinator
 - b. EMS/OHSAS representative
 - c. Training Coordinator
 - d. Environmental Compliance
 - e. Safety & Health Representative
 - f. Local Emergency Coordinator
 - g. Facility Support Representative

Asher Etkin
Edward Lessard
John Maraviglia
Melvin Van Essendelft
Peter Cirnigliaro
CAS Watch
Paul Bergh

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Safety/Security Notes:

4. Physics key ISM personnel are:

- | | |
|------------------------------------|-------------------------------|
| a. ESH Coordinator | Ronald Gill & Michael Zarcone |
| b. EMS/OHSAS representative | Ronald Gill & Michael Zarcone |
| c. Training Coordinator | Barbara Moebes |
| d. Environmental Compliance | Melvin Van Essendelft |
| e. Safety & Health Representative | Wai-Lin Litzke |
| f. Local Emergency Coordinator | Sal Marino |
| g. Facility Support Representative | Joe Vignola |

2007	HBD Repairs, DC (minor) repairs), MPC N&S upgrade, MuTr FEE upgrade prototype, infrastructure upgrades & repairs, misc. subsystem work
2008	MuTr FEE upgrades 1 octant 1&2 S, Cu absorber test, RPC3 S, infrastructure upgrades & repairs, misc. subsystem work
2009	Scaffolding in MMS and MMN, MuTr FEE N&S stn. 2 & 3, MuTr N&S stn. 2 & 3 repairs, RPC2 S&N, RPC3 N, Cu absorbers, infrastructure upgrades & repairs, misc. subsystem work
2010	Remove HBD & RXNP, remove beampipe, DC West upgrade, VTX barrel, RPC1 N&S, MuTr FEE stn. 1 N&S, MuTr stn. 1 N&S repairs, infrastructure upgrades & repairs, misc. subsystem work
2011	NCC S, FVTX, infrastructure upgrades & repairs, misc. subsystem work
2012	NCC N, upgrades contingency & wishlist, infrastructure upgrades & repairs, misc. subsystem work

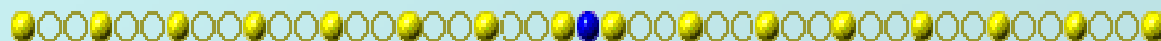
** Years refer to the shutdown year and follow the run with the similar number (i.e. work in 2007 is to be done in the shutdown that follows run 7, and so on)*

Where To Find PHENIX Technical Info



These are
"The Dog Days of Summer"

Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

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